



ROY COOPER
Governor

MICHAEL S. REGAN
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MICHAEL A. ABRACZINSKAS
Acting Director

May XX, 2017

J.R. Holton
Secretary - Treasurer
Lee Brick and Tile Company, Inc.
PO Box 1027
Sanford, North Carolina 27331

SUBJECT: Air Quality Permit No. 03464T27
Facility ID: 5300024
Lee Brick and Tile Company, Inc..
Sandord, Lee County, North Carolina
Permit Class: Title V
PSD Class: Minor

Dear Mr. Holton:

In accordance with your completed Air Quality Permit Application for a renewal of your Title V permit received February 28, 2017, we are forwarding herewith Air Quality Permit No. 03464T27 to Lee Brick and Tile Company, Inc., Sanford, Lee County, North Carolina authorizing the continued operation of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 02Q .0503(8) have been listed for informational purposes as an "ATTACHMENT." Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

As the designated responsible official it is your responsibility to review, understand, and abide by all of the terms and conditions of the attached permit. It is also your responsibility to ensure that any person who operates any emission source and associated air pollution control device subject to any term or condition of the attached permit reviews, understands, and abides by the condition(s) of the attached permit that are applicable to that particular emission source.

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. This hearing request must be in the form of a written petition, conforming to NCGS (North Carolina General Statutes) 150B-23, and filed with both the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Air Quality, Permitting Section, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641.

The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Please note that this permit will be stayed in its entirety upon receipt of the request for a hearing. Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding 30 days after issuance.

You may request modification of your Air Quality Permit through informal means pursuant to NCGS 150B-22. This request must be submitted in writing to the Director and must identify the specific provisions or issues for which the modification is sought. Please note that this Air Quality Permit will become final and binding regardless of a request for informal modification unless a request for a hearing is also made under NCGS 150B-23.

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of NCGS 143-215-108A(b) and received written approval from the Director of the Division of Air Quality to commence construction. Failure to receive an Air Quality Permit or written approval prior to commencing construction is a violation of GS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in GS 143-215.114A and 143-215.114B.

Lee County has not triggered increment tracking under PSD for any pollutants, so no tracking is required.

This Air Quality Permit shall be effective from May XX, 2017 until April 30, 2022, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein.

Should you have any questions concerning this matter, please contact Lori Ann Phillips at (919) 707-8461 or lori.phillips@ncdenr.gov.

Sincerely yours,

William D. Willets, P.E., Chief, Permitting Section
Division of Air Quality, NCDEQ

Enclosure

c: Heather Ceron, EPA Region 4
Connie Horne (cover letter only)
Raleigh Regional Office
Central Files

ATTACHMENT to Permit No. 03464T27

Insignificant Activities per 15A NCAC 02Q .0503(8)

Building	ID Number	Source Description
Clay Shed	IS-G-C-8	Clay Shed conveyors
Grinding Room	IS-GRF-1 IS-GRF-3	grinding room feeder for Plant 1 and 2 grinding room feeder for Plant 3
Reclaimer Building for Plant 1&2	IS-RM-COC IS-RM-Rec-1 IS-RM-F-Aux IS-RM-CB-1 IS-RM-CB-2 IS-RM-F -1 IS-RM-F -2 IS-RM-C-1-1 IS-RM-C-1-2 IS-RM-C-2-1 IS-RM-C-2 -2	cross over conveyor reclaimer #1 raw material feeder Plant 2 collection belt #1 collection belt #2 feeder No.1 feeder No.2 raw material conveyor 1 to Plant 1 raw material conveyor 1 to Plant 2 raw material conveyor 2 to Plant 1 raw material conveyor 2 to Plant 2
Reclaimer for Plant 3	IS-RC IS-G2-C-11	reclaimer #2 at Plant 3 Collection belt for reclaimer at Plant 3
Outside	IS-G2-C-12 IS-F-3 IS-G2-C-13	conveyor from G2-C-11 to feeder Outside feeder conveyor from feeder to pugmill
Making Room for Plant 1	IS-P1-1 IS-P1-EXT IS-P1-C1 IS-P1-C2 IS-P1-WC1 through IS-P1-WC6 IS-P1-SM-1 IS-P1-SP	chute with material from IS-RM-C-2-1, located in Making Room for Plant 1 pugmill/extruder, located in Making Room for Plant 1 conveyor 1 from extruder to settling machine, located in Making Room for Plant 1 conveyor 2 from extruder to settling machine, located in Making Room for Plant 1 waste belt conveyors 1 through 6, located in Making Room for Plant 1 sand mixer, located in Making Room for Plant 1 sand pile, located in Making Room for Plant 1
Making Room for Plant 2	IS-P2-1 IS-P2-EXT IS-P2-C1 IS-P2-C2 IS-P2-WC1 through WC3 IS-P2-SM-1	chute with material from IS-RM-C-2 -2, located in Making Room for Plant2 pugmill/extruder, located in Making Room for Plant 2 conveyor 1 from extruder to settling machine, located in Making Room for Plant 2 conveyor 2 from extruder to settling machine, located in Making Room for Plant 2 waste belt conveyors 1 through 3, located in Making Room for Plant 2 sand mixer, located in Making Room for Plant 2

Building	ID Number	Source Description
	IS-P2-SP	sand pile, located in Making Room for Plant 2
Making Room for Plant 3	IS-P3-1 IS-P3-EXT IS-P3-C1 IS-P3-C2 IS-P3-WC1 through WC4 IS-P3-SM-1 IS-P3-SP	chute with material from IS-G2-C-13 pugmill/extruder conveyor 1 from extruder to settling machine conveyor 2 from extruder to settling machine waste belt conveyors 1 through 4 sand mixer sand pile
Located outside of Plant 3	IS-VS3	Kiln vacuum system with an inherent fabric filter, located outside of Plant 3
Located outside of Plant 2	IS-VS2	Kiln vacuum system with an inherent fabric filter, located outside of Plant 2
Located outside of Plant 1	IS-VS1	Kiln vacuum system with an inherent fabric filter, located outside of Plant 1
Storage Tanks	IS-ST-1 through IS-ST-3 IS-ST-4 IS-ST-5 through IS-ST-7 IS-ST-8 through IS-ST-10 IS-ST-11 and IS-ST-12 IS-ST-13 and IS-ST-14 IS-ST-15 IS-ST-16 and IS-ST-17 IS-ST-18	Three 1,000 gallon brick oil tanks One 250 gallon brick oil tank Three 250 gallon waste oil tanks Three 30,000 gallon propane tanks two 500 gallon gasoline tanks two 1,000 gallon diesel tanks one 10,000 gallon diesel tank two 150 gallon hydraulic oil tanks one 250 gallon heating oil tank
Waste Material Feeders	IS-WMF-1 IS-WMF-2 IS-WMF-3	Three waste material feeders, one each in Plant Nos. 1, 2, and 3 Making rooms
Brick Dryers	IS-BD1 IS-BD2 IS-BD3	Three brick dryers utilizing heat from the cooling zone of each of three brick kilns (kilns 1, 2 and 3)
Propane Vaporizer	IS-PV	Propane vaporizer (2 million Btu per hour)
Conveyors and Feeders in ground material storage	IS-RM4-Rec	Material Reclaimer
	IS-RM4-C-1	30 inch Reclaimer Conveyor
	IS-RMS-C-2	30 inch belt conveyor
	IS-RM4-F	Even clay feeder
	IS-RMS-C-3	30 inch belt conveyor

Building	ID Number	Source Description
Conveyors, pugmill, coatings pile and mixer in the new making room continued	IS-P4-PPM	Prepugmill
	IS-RM4-C-4	30 inch belt conveyor
	IS-P4-EXT	Pugmill/extruder
	IS-P4-OB	Belt conveyor from extruder to setter
	IS-P4-SET	Brick setter
	IS-P4-WC-1	Waste belt conveyor 1
	IS-P4-WC-2	Waste belt conveyor 2
	IS-P4-WC-3	Waste belt conveyor 3
	IS-P4-WC-4	Waste belt conveyor 4
	IS-P4-WC-5	Waste belt conveyor 5
	IS-P4-WC-6	Waste belt conveyor 6
	IS-WMF-4	Waste material feeder
	IS-P4-CM	Coatings mixer
	IS-P4-CP	Coatings pile
	IS-VS4	New vacuum system for Kiln 4
	IS-PV2	Propane Vaporizer
	IS-BD4	Brick Dryer utilizing heat from the cooling zone of Kiln 4
Storage tanks with brick oil, diesel, gasoline, waste oil and hydraulic oil	IS-ST-4-BO	1000 gallon brick oil tank
	IS-ST-4-DIE	1000 gallon diesel tank
	IS-ST-4-GAS	500 gallon gasoline tank
	IS-ST-4-WO	250 gallon waste oil tank
	IS-ST-4-HY	150 gallon hydraulic oil tank

1. Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement or that the Permittee is exempted from demonstrating compliance with any applicable requirement.
2. When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 02D .1100 "Control of Toxic Air Pollutants" or 02Q .0711 "Emission Rates Requiring a Permit".
3. For additional information regarding the applicability of MACT or GACT see the DAQ page titled "The Regulatory Guide for Insignificant Activities/Permits Exempt Activities". The link to this site is as follows: <http://deq.nc.gov/about/divisions/air-quality/air-quality-permits/specific-permit-conditions-regulatory-guide>.

Summary of Changes to Permit

The following changes were made in the Tehnical Coating International, Inc. Air Permit No. 03464T26:

Page No.	Section	Description of Changes
Cover and throughout	Cover and throughout	Updated all dates and permit revision numbers.
Cover and throughout	Cover and throughout	Changed the name of the department to "Department of Environmental Quality."
26	Section 3	Updated the General Conditions to version 4.0.
5	Section 1	Removed the air-to-cloth ratio from the description of the bagfilters and placed the filter surface area (ft ²) in the bagfilter description instead. This was done per a request from the Raleigh Regional Office in agreement with the applicant.



State of North Carolina
Department of Environmental Quality
Division of Air Quality

AIR QUALITY PERMIT

Permit No.	Replaces Permit No.(s)	Effective Date	Expiration Date
03464T27	03464T26	May XX, 2017	April 30, 2022

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and Title 15A North Carolina Administrative Codes (15A NCAC), Subchapters 02D and 02Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 02Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

Permittee: **Lee Brick and Tile Company, Inc.**

Facility ID: **5300024**

Facility Site Location: **3704 Hawkins Road**
City, County, State, Zip: **Sanford, Lee County, North Carolina 27331**

Mailing Address: **P.O. Box 1027**
City, State, Zip: **Sanford, Lee County, North Carolina 27331**

Application Number: **5300024.17A**
Complete Application Date: **February 28, 2017**

Primary SIC Code: **3251**
Division of Air Quality,
Regional Office Address: **Raleigh Regional Office**
3800 Barrett Drive
Raleigh, North Carolina 27609

Permit issued this the XXth day of May, 2017.

William D. Willets, P.E., Chief, Air Permitting Section
By Authority of the Environmental Management Commission

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SECTION 1 - PERMITTED EMISSION SOURCES AND ASSOCIATED AIR POLLUTION CONTROL DEVICES AND APPURTENANCES

The following table contains a summary of all permitted emission sources and associated air pollution control devices and appurtenances:

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-K1 02D .1109 Case By Case MACT	One natural gas/propane/butane-fired brick tunnel kiln (22.5 million Btu per hour heat input and 12.24 tons per hour maximum fired brick production rate)	N/A	N/A
ES-K2 02D .1109 Case By Case MACT	One natural gas/propane/butane-fired brick tunnel kiln (22.5 million Btu per hour heat input and 9.64 tons per hour maximum fired brick production rate)	N/A	N/A
ES-K3 02D .1109 Case By Case MACT	One natural gas/propane/butane-fired brick tunnel kiln (30 million Btu per hour heat input and 12.67 tons per hour maximum fired brick production rate)	N/A	N/A
ES-K4 02D .1109 Case By Case MACT	One natural gas/propane/butane-fired brick tunnel kiln (41 million Btu per hour heat input and 13.5 tons per hour maximum fired brick production rate)	CD-K4-SCR	Dry Lime Adsorber (DLA)
NSPS Subpart OOO	Plants 1 and 2 NSPS-Affected Grinding and Screening Operations (175 tons per hour capacity) consisting of:	N/A	N/A
F-C-1	One belt conveyor (36 inches in width)		
G-C-1, G-C-2, G-C-3, G-C-5, G-C-6, G-C-7, and RM-SC	Seven belt conveyors (30 inches in width each)		
C-1	One primary roll crusher (21 inches in width by 36 inches in length)		
S-1b	One scalping screen (4 feet in width by 10 feet in length)		
G-C-4	One belt conveyor (42 inches in width)		
S-1a.1 through S-1a.4	Four finishing screens (5 feet in width by 8 feet in length each)		
G-1	One hammermill (175 tons per hour capacity)		
VGF-1	One vibrating grizzly feeder (175 tons per hour capacity)		

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
NSPS Subpart OOO G2-C-1, G2-C-2, G2-C-3, and G2-C-5 through G2-C-10 C-2 S-2b G2-C-4 S-2a.1 through S-2a.4 G-2 F-C-2	Plant 3 NSPS-Affected Grinding and Screening Operations (175 tons per hour capacity) consisting of: Nine belt conveyors (30 inches in width each) One primary roll crusher (21 inches in width by 36 inches in length) One scalping screen (4 feet in width by 10 feet in length) One conveyor belt (42 inches in width) Four finishing screens (5 feet in width by 8 feet in length each) One hammermill (175 tons per hour capacity) One conveyor belt (36 inches in width)	N/A	N/A
NSPS Subpart OOO G4-C-1 G4-C-2 C4-C-3 G4-C-4 G4-C-5 G4-C-6 G4-C-7 G4-C-8 G4-C-9 G4-C-10 F-4 VGF-4 C-4 G-4 S-4A.1 through S-4a.4 S-4B	Plant 4 NSPS-Affected Grinding and Screening Operations (175 tons per hour capacity) consisting of: 36 inch Belt conveyor 30 inch Oversize belt conveyor 30 inch Conveyor from scalping screen to hammermill (course material) 48 inch Rough service "Picking Table Conveyor" 36 inch Belt conveyor 30 inch Fines conveyor 30 inch Belt conveyor 30 inch Belt conveyor 30 inch Inclined conveyor 30 inch Shuttle belt conveyor Dump hopper Trio 40 inches by 16 inches vibrating grizzly Trio CT series 24 inches by 36 inches overhead eccentric jaw crusher Basic "Super" Pulv-O-Pactor Four "Clayshaker" Model HX 5 feet by 10 feet single deck vibrating screens Simplicity 5 feet by 16 feet double deck screen Model 95110BX	N/A	N/A
ES-CD	Coatings dryer	N/A	N/A
ES-MR	Mix room	CD-MRBH	Bagfilter

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-P1-SA-1 ES-P1-SA-2 ES-P1-SA-3	Three sand application units of Plant 1 Making Room	CD-BMR1BH	Bagfilter with 8,128 square feet of filter surface area
ES-P2-SA-1 ES-P2-SA-2 ES-P2-SA-3	Three sand application units of Plant 2 Making Room	CD-BMR2BH	Bagfilter with 8,128 square feet of filter surface area
ES-P3-SA-1 ES-P3-SA-2 ES-P3-SA-3	Three sand application units of Plant 3 Making Room	CD-BMR3BH	Bagfilter with 3048 square feet of filter surface area
ES-P4-SA-1 ES-P4-SA-2 ES-P4-SA-3 ES-P4-SA-4	Four sand application units of Plant 4 Brick Making Room	CD-BMR4BH	Bagfilter with 8,128 square feet of filter surface area

SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

2.1 - Emission Source(s) and Control Devices(s) Specific Limitations and Conditions

The emission sources and associated air pollution control device(s) and appurtenances listed below are subject to the following specific terms, conditions, and limitations, including the testing, monitoring, recordkeeping, and reporting requirements as specified herein:

- A. Four natural gas/propane/butane-fired brick tunnel kilns (ID No. ES-K1, 12.24 tons per hour maximum fired brick production rate, 22.5 million Btu per hour maximum heat input rate; ID No. ES-K2, 9.64 tons per hour maximum fired brick production rate, 22.5 million Btu per hour maximum heat input rate, ID No. ES-K3, 12.67 tons per hour maximum fired brick production rate, 30 million Btu per hour maximum heat input rate, and ID No. ES-K4, 13.5 tons per hour maximum fired brick production rate, 41 million Btu per hour maximum heat input rate and associated dry limestone adsorber, ID No. CD-K4-SCR)**

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
particulate matter including PM ₁₀	$E=4.10P^{0.67}$ Where: E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 02D .0515
particulate matter (PM ₁₀)	Facility wide: See section 2.2 A.4	15A NCAC 02Q .0317 Avoidance conditions for 15A NCAC 02D .0530(b) PSD
carbon monoxide	Facility wide: See section 2.2 A.5	15A NCAC 02Q .0317 Avoidance conditions for 15A NCAC 02D .0530(b) PSD
sulfur dioxide	2.3 pounds per million Btu	15A NCAC 02D .0516
visible emissions	20 percent opacity	15A NCAC 02D .0521

Filterable PM	Affected Sources: ID No. ES-K2 Implement best work practices Affected Sources: ID Nos. ES-K1, ES-K3, and ES-K4 0.17 pounds of filterable PM per ton of brick produced	15A NCAC 02D .1109
HCl-equivalent	70.5 pounds per hour from all four kilns, combined	15A NCAC 02D .1109
odorous emissions	See Section 2.2 (A)(1); State-enforceable only	15A NCAC 02D .1806
toxic air pollutants	See Section 2.2 (A)(2); State-enforceable only	15A NCAC 02D .1100
	See Section 2.2 (A)(3); State-enforceable only	15A NCAC 02Q .0711

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

- a. Emissions of particulate matter from the brick tunnel kilns (**ID Nos. ES-K1, ES-K2, ES-K3, and ES-K4**) shall not exceed an allowable emission rate as calculated by the following equation: [15A NCAC 02D .0515(a)]

$$E = 4.10 \times P^{0.67} \quad \text{Where } E = \text{allowable emission rate in pounds per hour}$$

$$P = \text{process weight in tons per hour}$$

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring [15A NCAC 02Q .0508(f)]

- c. To ensure compliance, the Permittee shall perform an inspection of the natural gas/propane-fired brick tunnel kilns in accordance with the following:
- every six months, perform a visual inspection of the brick tunnel kilns' emissions ductwork system for leaks, holes, or disrepair; and
 - every six months, perform a visual inspection of the tunnel brick kilns' fuel combustion system.
- The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if inspections of the system ductwork or fuel combustion systems are not performed.

Record keeping [15A NCAC 02Q .0508(f)]

- d. The results of the monitoring shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative upon request. The log shall record the following:
- the date and time of each recorded action;
 - the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce particulate emissions; and
 - the results of any corrective actions performed.
- The Permittee shall be deemed in non-compliance with Section 2.1 A.1.a. above, if records of the monitoring results are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit, in writing a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

- a. Emissions of sulfur dioxide from the brick tunnel kilns (**ID Nos. ES-K1, ES-K2, ES-K3, and ES-K4**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 02D .0516]

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 A. 2. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring, recordkeeping, or reporting is required to ensure compliance with this regulation.

3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from the tunnel brick kilns (**ID Nos. ES-K1, ES-K2, ES-K3, and ES-K4**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521 (d)]

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A. 3. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring, recordkeeping, or reporting is required to ensure compliance with this regulation.

4. 15A NCAC 02D .1109: CAA § 112(j); Case-by-Case MACT for Brick Manufacturers

- a. The initial compliance date for the emissions standards, work practice standards, and associated monitoring, recordkeeping, and reporting requirements listed below is **December 6, 2015**. These conditions need not be included on the annual compliance certification until after the initial compliance date.

Emissions Standards [15A NCAC 02D .1109]

- b. Emissions of the following regulated pollutants shall not exceed the emissions limits listed below:

i. **Filterable PM:**

(A) 0.17 lbs/ton for the large tunnel kilns (**ID Nos. ES-K1, ES-K3, and ES-K4**).

(B) The small tunnel kiln (**ID No. ES-K2**) shall comply with work practice standards.

- ii. **HCl-equivalent:** 70.5 lbs/hr from all tunnel kilns (**ID Nos. ES-K1, ES-K2, ES-K3, and ES-K4**). HCl-equivalent is defined by the following equation:

$$E = E_{\text{HCl}} + E_{\text{HF}} \cdot (\text{RfC}_{\text{HCl}} / \text{RfC}_{\text{HF}})$$

Where:

E = HCl-equivalent emission rate (in lbs/hr)

E_{HCl} = HCl emission rate (in lbs/hr);

E_{HF} = HF emission rate (in lbs/hr);

RfC_{HCl} = Reference concentration for HCl (20 $\mu\text{g}/\text{m}^3$); and

RfC_{HF} = Reference concentration for HF (14 $\mu\text{g}/\text{m}^3$).

- iii. **Routine Maintenance Periods:** The limits above apply at all times except for periods of routine maintenance during which the Permittee may bypass the DLA (**ID No. CD-K4-SCR**) and continue operating the kiln (**ID No. ES-K4**) for up to 4 percent of the annual operating uptime. The Permittee must minimize HAP emissions during the bypass period and must minimize the time period during which the kiln is operating and the control device is offline.

The Permittee shall follow the procedures in 15A NCAC 02D. 0535 for any excess emissions that occur during periods of startup, shutdown, or malfunction.

Testing [15A NCAC 02Q .0508(f)]

- c. The Permittee shall conduct an initial compliance test for all pollutants listed in Section 2.1 A.4.b. above within 180 days of the initial compliance date or within 60 days of startup of any kiln after April 3, 2016, unless the NC DAQ – Stationary Source Compliance Branch approves a previously conducted performance test as an equivalent compliance demonstration. Testing shall be performed in accordance with 15A NCAC 02Q .0508(f) and General Condition JJ found in Section 3.
 - i. Measure pollutant emission concentrations while operating at the maximum production level, as follows:
 - (A) **Particulate Matter**: PM testing is only required at the large tunnel kilns (**ID Nos. ES-K1, ES-K3, and ES-K4**). Use Method 5 in 40 CFR 60, Appendix A.
 - (B) **HF & HCl**: HF and HCl testing is required for all the tunnel kilns, unless an alternative test plan is approved by the NC DAQ – SSCB for demonstrating compliance with the total HCl-equivalent emission limitation in Section 2.1.A.4.b.ii. Use **either** of the following methods:
 - (1) Use Method 26 or 26A in 40 CFR 60, Appendix A. Method 26A may only be used when no acid PM (*e.g.*, HF or HCl dissolved in water droplets emitted by sources controlled by a wet scrubber) is present.
 - (2) Use Method 320 of 40 CFR 63, Appendix A. Follow the analyte spiking procedures of Section 13 of Method 320 unless you can demonstrate that the complete spiking procedure has been conducted at a similar source.
 - ii. Establish the operating limit for the limestone feeder setting at the DLA (**ID No. CD-K4-SCR**) using data from the limestone feeder during the performance test. Establish the limestone feeder setting at least one week prior to the performance test and maintain the feeder setting for the one-week period that precedes the performance test and during the performance test.
 - iii. Document the source and grade of limestone used at the DLA (**ID No. CD-K4-SCR**) during the performance test using records of limestone purchase.

Performance tests may not be conducted during periods of startup, shutdown, or malfunction. The Permittee shall be deemed in non-compliance with 15A NCAC 02D .1109 if the required tests are not conducted, or if the results of the emissions tests exceed the limits in Section 2.1 A.4.b. above.

Work Practice Standards [15A NCAC 02Q .0508(f)]

- d. The Permittee shall perform annual inspection and maintenance of the small tunnel kiln (**ID No. ES-K2**) as recommended by the manufacturer, or as a minimum, the inspection and maintenance requirement shall include the following:
 - i. Conduct a visual inspection of the ductwork system for each tunnel kiln for leaks, holes, or disrepair; and,
 - ii. Inspect each burner, and clean or replace any components of the burner as necessary;
 - iii. Inspect the system controlling the air-to-fuel ratio, and ensure that it is correctly calibrated and functioning properly.

The Permittee shall conduct at least one inspection per calendar year to demonstrate compliance with this requirement. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109 if the affected tunnel kilns not inspected and maintained as required above.

Monitoring [15A NCAC 02Q .0508(f)]

- e. The Permittee shall maintain a pressure drop across the DLA (**ID No. CD-K4-SCR**) at the large tunnel kiln (**ID No. ES-K4**).
 - i. The Permittee shall install, operate, and maintain a pressure measurement device at the DLA.
 - ii. Once per calendar day, the Permittee shall record the pressure drop across the DLA. The record shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109 if these monitoring and recordkeeping requirements are not met or if the Permittee does not maintain a pressure drop across the DLA, except during routine maintenance periods as provided for in Section 2.1.4.b.iii. of this permit.
- f. The Permittee shall maintain an adequate amount of limestone in the limestone hopper, storage bin (located at the top of the DLA), and DLA (**ID No. CD-K4-SCR**) at all times to meet the limestone feeder setting.
 - i. Once per day, the Permittee shall verify that the limestone hopper and storage bin at the DLA (**ID No. CD-K4-SCR**) contain adequate limestone and record the results.
 - ii. The record of the daily check shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109 if these monitoring and recordkeeping requirements are not met or if the Permittee does not maintain an adequate amount of limestone as provided above.

- g. The Permittee shall use the same grade of limestone at the DLA (**ID No. CD-K4-SCR**) from the same source as was used during the performance test. The Permittee shall maintain records of the source and grade of limestone used. The records shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109 if these records are not maintained.
- h. The Permittee shall maintain the limestone feeder setting at the DLA (**ID No. CD-K4-SCR**) at or above the level established during the performance test.
 - i. Once per day, the Permittee shall check and record the limestone feeder setting to verify that it is being maintained at or above the level established during the performance test.
 - ii. The record of the daily check shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109 if these monitoring and recordkeeping requirements are not met or if the Permittee does not maintain the limestone feeder setting as provided above.

- i. The Permittee shall maintain no visible emissions (VE) from the DLA stack (**ID No. CD-K4-SCR**). The Permittee perform visible emissions observations as follows:
 - i. Conduct a daily Method 22 test (40 CFR 60, Appendix A). The duration of each Method 22 test must be at least 15 minutes. If VE are observed during any daily VE test, promptly initiate and complete corrective actions according to the site-specific OM&M plan.
 - ii. If no VE are observed in 30 consecutive daily Method 22 tests for any kiln stack, the Permittee may decrease the frequency of Method 22 testing from daily to weekly. If VE are observed during any weekly test, promptly initiate and complete corrective actions, resume Method 22 testing of that kiln stack on a daily basis, and maintain that schedule until no VE are observed in 30 consecutive daily tests, at which time the Permittee may again decrease the frequency of Method 22 testing to a weekly basis.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109 if the required visible emissions observations are not performed or if visible emissions are detected.

- j. Once per calendar month, the Permittee shall ensure that the limestone feed system on a DLA (**ID No. CD-K4-SCR**) replaces limestone at least as frequently as the schedule set during the performance test. Create and maintain a record of the monthly check in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109 if this requirement is not met.

Recordkeeping [15A NCAC 02Q .0508(f)]

- k. The Permittee shall maintain records of the production rates on a fired-product basis for each affected tunnel kiln (**ID Nos. ES-K1, ES-K2, ES-K3, and ES-K4**). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109 if these records are not maintained.
- l. The results of inspection and maintenance at the small tunnel kiln (**ID No. ES-K2**) shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. The date of each recorded action;
 - ii. The results of each inspection; and,
 - iii. The results of any maintenance performed on the tunnel kilns.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1109 if these records are not maintained.

- m. The results of the visible emissions observations at the large tunnel kiln (**ID No. ES-K4**) shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative upon request. The log shall record the following:
 - i. The date and time of each recorded action;
 - ii. The results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. The results of any corrective actions performed.

The Permittee shall be deemed in non-compliance with 15A NCAC 02D .1109 if records of the monitoring results are not maintained.

- n. The Permittee shall maintain a record of each period when the large tunnel kiln is operated while bypassing the DLA (**ID No. CD-K4-SCR**) in order to perform routine maintenance. The records shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request, and shall include:
- i. The start date and start time of the routine maintenance;
 - ii. The stop date and stop time of the routine maintenance;
 - iii. A description of the maintenance activities; and,
 - iv. The total time the kiln has operated in by-pass, and the total percentage of the operating time the kiln has operated in bypass for the previous 12-month period.
- The Permittee shall be deemed in non-compliance with 15A NCAC 02D .1109 if these records are not maintained or if the percentage of time the kiln operates in bypass exceeds 4% of the annual operating time.

Reporting [15A NCAC 02Q .0508(f)]

- o. The Permittee must submit a Notification of Compliance Status within 60 days following the completion of the final required performance test. The Notification of Compliance Status must include the following information:
- i. For the small tunnel kiln (**ID No. ES-K2**), a summary of the initial inspection required in Section 2.1.A.4.d. of this permit;
 - ii. A summary of the results of all performance tests conducted to demonstrate initial compliance as required in Section 2.1.A.4.c. of this permit;
 - iii. The limestone feeder setting value established for the DLA (**ID No. CD-K4-SCR**) during the performance test;
 - iv. The source and grade of limestone used at the DLA (**ID No. CD-K4-SCR**) during the performance test; and,
 - v. A description of any routine maintenance that the Permittee will perform on the DLA (**ID No. CD-K4-SCR**), during which the Permittee will continue operating the large tunnel kiln (**ID No. ES-K4**) while bypassing the control device.
- p. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
- i. Company name, facility ID number, and address;
 - ii. Statement by the Responsible Official with that official's name, title, and signature certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete;
 - iii. A description of routine maintenance performed while the DLA (**ID No. CD-K4-SCR**) was offline and the large tunnel kiln (**ID No. ES-K4**) was operating, including the following:
 - (A) The date and time when the DLA was shutdown and restarted.
 - (B) Identification of the number of hours that the kiln operated while the DLA was offline.
 - (C) The *total* amount of time (in hours and % of total operating time) that the associated kiln operated during the current semiannual compliance period and during the previous semiannual compliance period.
 - iv. For each deviation from a limitation (emission limit, operating limit, or work practice standard), include the following information:
 - (A) The total operating time of each affected source during the reporting period.
 - (B) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

If there were no deviations from any of the applicable limitations, a statement that there were no deviations during the reporting period.

B. Plant 1 and 2 NSPS-affected grinding and screening operations consisting of:**Nine belt conveyors (F-C-1, G-C-1, G-C-2, G-C-3, G-C-4, G-C-5, G-C-6, G-C-7 & RM-SC)****One primary roll crusher (C-1)****One scalping screen (S-1b)****Four finishing screens (S-1a.1 through S-1a.4)****One hammermill (G-1)****One vibrating grizzly feeder (VGF-1), and****Plant 3 NSPS-affected grinding and screening operations consisting of:****Eleven conveyors (F-C-2 and G2-C-1 through G2-C-10)****One primary roll crusher (C-2)****One scalping screen (S-2b)****Four finishing screens (S-2a)****One hammermill (G-2)**

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
visible emissions	10 percent opacity for belt conveyors, scalping screens, finishing screens and grizzly feeder, 15 percent opacity for crushers and hammermills, OR 7 percent opacity from the building(s) enclosing the affected facilities	15A NCAC 02D .0524 (40 CFR 60.670, Subpart OOO)
odors	See Section 2.2(A)(1) - odorous emissions must be controlled; State-enforceable only	15A NCAC 02D .1806

1. 15A NCAC 02D .0524: NSPS 40 CFR PART 60, SUBPART OOO - STANDARDS OF PERFORMANCE FOR NONMETALLIC MINERAL PROCESSING PLANTS.**Emission Standard(s)** [15A NCAC 02D .0524].

- a. For the NSPS affected facilities within the building subject to a 10 or 15 percent opacity limit, the Permittee shall meet the requirements of this Subpart by demonstrating compliance with 40 CFR 60.672(c) from each individual affected facility **OR** by complying with the 40 CFR 60.672(e) limit of 7 percent opacity from the unvented building. Additionally, the Permittee shall comply with all applicable provisions, notification, testing, reporting, record keeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60.670, Subpart OOO, including Subpart A "General Provisions."

Testing [15A NCAC 02D .0501(c)(3)]

- b. Initial compliance or subsequent additional testing has been or will be performed in accordance with the requirements of 15A NCAC 02D .0524 (40 CFR 60.670, Subpart OOO), 15A NCAC 02D .0501(c)(8) and (18) and General Condition JJ when determining compliance of each individual affected facility with 40 CFR 60.672(a), (b) and (c) **OR** Method 22 testing, in accordance with the requirements of 15A NCAC 02D .0524 (40 CFR 60.670 (Subpart OOO), 15A NCAC 02D .0501(c)(8) and (18) and General Condition JJ, has been or will be performed when determining compliance with the "no visible emissions" standard of 40 CFR 60.672(e). If test results exceed the applicable limit(s) as given in Section 2.1 B.1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

Monitoring [15A NCAC 02Q .0508(f)]

- c. Monitoring to ensure compliance with the applicable emissions standard(s) of Section 2.1 B.1.a. above shall be performed by the Permittee as follows:
- observation of a building enclosure containing affected facilities:

- (A) observe each building containing each NSPS-affected clay grinding plant each month for any fugitive visible emissions. Should any visible emissions exceed 7 percent, each affected facility enclosed in the building shall be deemed to be in noncompliance with 15A NCAC 02D .0524 **UNLESS** a compliance demonstration for each affected facility enclosed in the building is performed in accordance with the following;
 - (B) an approved Method 9 opacity determination meeting the requirements of 40 CFR 60.670 (Subpart OOO, 15A NCAC 02D .0501(c)(8) and (18) is performed for each enclosed NSPS-affected facility and visible emissions are demonstrated to comply with the applicable limit(s) given in 60.672(b) and (c). If compliance for the affected facility cannot be demonstrated, then the affected facility shall be deemed to be in noncompliance with 15A NCAC 02D .0524, **OR**
- ii. observation of an individual affected facility enclosed in the building:
- (A) After the initial performance test required under 40 CFR 60.670, the Permittee shall observe each individual affected facility enclosed in the building each month for any visible emissions which exceed normal. The Permittee shall establish normal emissions by observing each week for thirty (30) days the emissions from each enclosed affected facility. Should monthly observed emissions of an enclosed affected facility exceed the established normal visible emissions for that affected facility, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0524, **UNLESS**,
 - (B) an approved Method 9 (or Method 22 if observing an affected facilities building enclosure) opacity determination meeting the requirements of 40 CFR 60.670 (Subpart OOO, 15A NCAC 02D .0501(c)(8) and (18) is performed for each enclosed affected facility and visible emissions are demonstrated to comply with the applicable limit(s) given in 60.672(b) and (c). If compliance for the affected facility cannot be demonstrated, then the affected facility shall be deemed to be in noncompliance with 15A NCAC 02D .0524.

Recordkeeping [15A NCAC 02Q .0508(f)]

- d. Results of monitoring shall be maintained in a log (written or electronic form). The following shall be recorded in the log:
- i. the results of the Permittee's observation to establish normal;
 - ii. the results of the Permittee's monthly buildings fugitive emissions observations or the monthly opacity emissions observations for each affected facility;
 - iii. if option in Section 2.1 B.1.c.ii.(A) above is followed, the observation to establish normal should be recorded for each affected facility within each building.
 - iv. whether the observed emissions source was a building or each affected facility within each building, the date and time of each observation, and
 - v. if any emissions were observed from an enclosed building exceeded 7 percent opacity or whether any emissions observed exceeded normal, the time and any resulting action(s) taken to reduce emissions exceeding an applicable limit, and
 - vi. the date, time, and type of all corrective actions performed to prevent such an exceedance from re-occurring and a copy of any Method 9 or Method 22 opacity testing performed for the purpose of demonstrating compliance with the applicable emissions limit(s).
- The Permittee shall be deemed in non-compliance with Section 2.1.B.1.a. above, if records of the monitoring results are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a written summary report of the all monitoring and record keeping activities as follows:
- i. a report of any changes in existing facilities as specified in 40 CFR 60.676 - Reporting and record keeping, including equipment being replaced and the replacement equipment of affected facilities. This report shall be submitted to the Administrator as required.
 - ii. a summary report of monitoring and record keeping activities by January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

- iii. a report of any noncomplying emissions for all emissions which exceed the 7 percent opacity limit of 40 CFR 60.672(e) or the applicable opacity limit(s) of 40 CFR 60.672(a), (b) and (c) as established using Method 9 or 22 compliance demonstrations conducted on an affected facility or building, along with the determined cause of exceedance and the resulting corrective action taken.

C. Coatings dryer (ID No. ES-CD, 0.3 million Btu per hour maximum heat input rate)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
particulate matter including PM ₁₀	$E=4.10P^{0.67}$ Where: E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 02D .0515
particulate matter (PM ₁₀)	Facility wide: See section 2.2 A.4	15A NCAC 02Q .0317 Avoidance conditions for 15A NCAC 02D .0530(b) PSD
carbon monoxide	Facility wide: See section 2.2 A.5	15A NCAC 02Q .0317 Avoidance conditions for 15A NCAC 02D .0530(b) PSD
sulfur dioxide	2.3 pounds per million Btu	15A NCAC 02D .0516
visible emissions	20 percent opacity	15A NCAC 02D .0521
odorous emissions	See Section 2.2.(A)(1); State-enforceable only	15A NCAC 02D .1806

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

- a. Emissions of particulate matter from the coatings dryer (ID No. ES-CD) shall not exceed an allowable emission rate as calculated by the following equation:

$$E = 4.10 \times P^{0.67} \quad \text{Where} \quad E = \text{allowable emission rate in pounds per hour} \\ P = \text{process weight in tons per hour}$$

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring [15A NCAC 02Q .0508(f)]

- c. To ensure compliance, the Permittee shall perform an inspection of the natural gas/propane-fired coatings dryer in accordance with the following:
- every six months, perform a visual inspection of the coatings dryer emissions ductwork system for leaks, holes, or disrepair; and
 - every six months, perform a visual inspection of the coatings dryer fuel combustion system.
- The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if inspections of the system ductwork or fuel combustion systems are not performed.

Recordkeeping [15A NCAC 02Q .0508(f)]

- d. The results of the monitoring shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative upon request. The log shall record the following:
- the date and time of each recorded action;

- ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce particulate emissions; and
- iii. the results of any corrective actions performed.

The Permittee shall be deemed in non-compliance with Section 2.1 C.1.a. above, if records of the monitoring results are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit, in writing a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

- a. Emissions of sulfur dioxide from the coatings dryer (**ID No. ES-CD**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 02D .0516]

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 C. 2. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring, recordkeeping, or reporting is required to ensure compliance with this regulation.

3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from the coatings dryer (**ID No. ES-CD**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521 (d)]

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C. 3. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

- c. To ensure compliance, once a month the Permittee shall observe the emission points of this source for any visible emissions above normal. The monthly observation must be made for each month/week of the calendar year period to ensure compliance with this requirement. If visible emissions from this source are observed to be above normal, the Permittee shall either:
 - i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
 - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 C.3. a. above. If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 02Q .0508(f)]

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. the results of any corrective actions performed.The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

D. Mixing room (ID No. ES-MR)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
particulate matter including PM ₁₀	$E=4.10P^{0.67}$ Where: E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 02D .0515
visible emissions	20 percent opacity	15A NCAC 02D .0521
odorous emissions	See Section 2.2 (A)(1); State-enforceable only	15A NCAC 02D .1806

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

- a. Emissions of particulate matter from the mixing room (**ID No. ES-MR**) shall not exceed an allowable emission rate as calculated by the following equation:

$$E = 4.10 \times P^{0.67} \quad \text{Where} \quad E = \text{allowable emission rate in pounds per hour} \\ P = \text{process weight in tons per hour}$$

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02D .0501 (c)(3)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 D.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring [15A NCAC 02Q .0508(f)]

- c. Particulate matter emissions from the mixing room (**ID No. ES-MR**) shall be controlled by the bagfilter. To ensure compliance, the Permittee shall perform inspections and maintenance on the bagfilter as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
- a monthly visual inspection of the system ductwork and material collection unit for leaks; and
 - an annual (for each 12 month period following the initial inspection) internal inspection of the bagfilter's structural integrity.
- The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the ductwork and bagfilters are not inspected and maintained.
- d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
- the date and time of each recorded action;
 - the results of each inspection;
 - the results of any maintenance performed on the bagfilters; and
 - any variance from manufacturer's recommendations, if any, and corrections made.
- The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if these records are not maintained.

Recordkeeping [15A NCAC 02Q .0508(f)]

- e. The results of the monitoring shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative upon request. The log shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce particulate emissions; and
 - iii. the results of any corrective actions performed.
 The Permittee shall be deemed in non-compliance with Section 2.1 D.1.a above, if records of the monitoring results are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- f. The Permittee shall submit, in writing a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from the mixing room (**ID No. ES-MR**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521(d)]

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 D.2. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

- c. To ensure compliance, once a month the Permittee shall observe the emission points of this source for any visible emissions above normal. The monthly observation must be made for each month/week of the calendar year period to ensure compliance with this requirement. If visible emissions from this source are observed to be above normal, the Permittee shall either:
 - i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
 - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 D.2. a. above.
 If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 02Q .0508(f)]

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. the results of any corrective actions performed.
 The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

E. Three sand application units of Plant 1 Making Room (ID Nos. ES-P1-SA-1, ES-P1-SA-2, and ES-P1-SA-3) and associated bagfilter (ID No. CD-BMR1BH)

Three sand application units of Plant 2 Making Room (ID Nos. ES-P2-SA-1, ES-P2-SA-2, and ES-P2-SA-3) and associated bagfilter (ID No. CD-BMR2BH)

Three sand application units of Plant 3 Making Room (ID Nos. ES-P3-SA-1, ES-P3-SA-2, and ES-P3-SA-3) and associated bagfilter (ID No. CD-BMR3BH)

Four sand application units of Plant 4 Making Room (ID Nos. ES-P4-SA-1, ES-P4-SA-2, ES-P4-SA-3, and ES-P4-SA-4) and associated bagfilter (ID No. CD-BMR4BH)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
particulate matter including PM ₁₀	$E = 55 * P^{0.11} - 40$ Where: E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 02D .0515
visible emissions	20 percent opacity	15A NCAC 02D .0521
odorous emissions	See Section 2.2(A)(1); State-enforceable only	15A NCAC 02D .1806

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

- a. Emissions of particulate matter from the sand application units (ID Nos. ES-P1-SA-1, ES-P1-SA-2, ES-P1-SA-3, ES-P2-SA-1, ES-P2-SA-2, ES-P2-SA-3, ES-P3-SA-1, ES-P3-SA-2, ES-P3-SA-3, ES-P4-SA-1, ES-P4-SA-2, ES-P4-SA-3, and ES-P4-SA-4) shall not exceed an allowable emission rate as calculated by the following equation:

$$E = 55 * P^{0.11} - 40$$

Where E = allowable emission rate in pounds per hour
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 E.1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring [15A NCAC 02Q .0508(f)]

- c. Particulate matter emissions from the sand application units (ID Nos. ES-P1-SA-1, ES-P1-SA-2, ES-P1-SA-3, ES-P2-SA-1, ES-P2-SA-2, ES-P2-SA-3, ES-P3-SA-1, ES-P3-SA-2, ES-P3-SA-3, ES-P4-SA-1, ES-P4-SA-2, ES-P4-SA-3, and ES-P4-SA-4) shall be controlled by the associated bagfilters (ID Nos. CD-BMR1BH, CD-BMR2BH, CD-BMR3BH, and CD-BMR4BH). To ensure compliance, the Permittee shall perform inspections and maintenance on the bagfilters, as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
- a monthly visual inspection of the system ductwork and material collection unit for leaks; and

- ii. an annual (for each 12 month period following the initial inspection) internal inspection of the bagfilter's structural integrity.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the ductwork and bagfilters are not inspected and maintained.

- d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each inspection;
 - iii. the results of any maintenance performed on the bagfilters; and
 - iv. any variance from manufacturer's recommendations, if any, and corrections made.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if these records are not maintained.

Recordkeeping [15A NCAC 02Q .0508(f)]

- e. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce particulate emissions; and
 - iii. the results of any corrective actions performed.

The Permittee shall be deemed in non-compliance with Section 2.1 E.1.a. above if records of the monitoring results are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- f. The Permittee shall submit, in writing a summary report of the monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from the sand application units (ID Nos. ES-P1-SA-1, ES-P1-SA-2, ES-P1-SA-3, ES-P2-SA-1, ES-P2-SA-2, ES-P2-SA-3, ES-P3-SA-1, ES-P3-SA-2, ES-P3-SA-3, ES-P4-SA-1, ES-P4-SA-2, ES-P4-SA-3, and ES-P4-SA-4) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 E.2. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

- c. To ensure compliance, once a month the Permittee shall observe the emission points of the sources (ID Nos. ES-P3-SA-1, ES-P3-SA-2, and ES-P3-SA-3) for any visible emissions above normal. The Permittee shall establish "normal" for these sources by February 26, 2004. If visible emissions from these sources are observed to be above normal, the Permittee shall either: (a) be deemed to be in noncompliance with 15A NCAC 02D .0521 or (b) demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .0501(c)(8) is below the limit given in Section 2.1 E.2.a. above. If the demonstration in (b) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

To ensure compliance, once a month, the Permittee shall observe the emission points of the sources (ID Nos. ES-P1-SA-1, ES-P1-SA-2, ES-P1-SA-3, ES-P2-SA-1, ES-P2-SA-2, ES-P2-SA-3) for any visible emissions above normal. The Permittee shall establish "normal" for these sources in the first 30 days following the commencement of operation. If visible emissions from this source are observed to be above normal, the Permittee shall either:

- i. take appropriate action to correct the above-normal emissions within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or

- ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .0501(c)(8) is below the limit given in Section 2.1 E.2.a. above.

If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

To ensure compliance, once a month, the Permittee shall observe the emission point(s) of emission sources ID Nos. ES-P4-SA-1, ES-P4-SA-2, ES-P4-SA-3, and ES-P4-SA-4 for any visible emissions above normal. The Permittee shall establish "normal" for these sources in the first 30 days following the commencement of operation. If visible emissions from this source are observed to be above normal, the Permittee shall either:

- i. take appropriate action to correct the above-normal emissions within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
- ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .0501(c)(8) is below the limit given in Section 2.1 E.2.a. above.

If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 02Q .0508(f)]

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. the results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

- F. Plant 4 NSPS-affected grinding and screening operations consisting of:**
Ten conveyors (G4-C-1, G4-C-2, G4-C-4 through G4-C-10, and C4-C-3)
One dump hopper (F-4)
One grizzly (VGF-4)
One jaw crusher (C-4)
One hammermill (G-4)
Four single deck screens (S-4A)
One double deck screen (S-4B)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Visible emissions	10 percent opacity for each grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station belt conveyors, scalping screens, finishing screens and grizzly feeder; 15 percent opacity for crushers and hammermills; OR 7 percent opacity from the building(s) enclosing the affected facilities	15A NCAC 02D .0524 (40 CFR 60.670, Subpart OOO)
odors	See Section 2.2(A)(1) - odorous emissions must be controlled; State-enforceable only	15A NCAC 02D .1806

1. 15A NCAC 02D .0524: NSPS 40 CFR PART 60, SUBPART OOO - STANDARDS OF PERFORMANCE FOR NONMETALLIC MINERAL PROCESSING PLANTS.

Emission Standard(s) [15A NCAC 02D .0524].

- a. For the NSPS affected facilities within the building subject to a 10 or 15 percent opacity limit, the Permittee shall meet the requirements of this Subpart by demonstrating compliance with 40 CFR 60.672(c) from each individual affected facility **OR** by complying with the 40 CFR 60.672(e) limit of 7 percent opacity from the unvented building. Additionally, the Permittee shall comply with all applicable provisions, notification, testing, reporting, record keeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60.670, Subpart OOO, including Subpart A "General Provisions."

Testing [15A NCAC 02D .0501(c)(3)]

- b. Initial compliance or subsequent additional testing will be performed in accordance with the requirements of 15A NCAC 02D .0524 (40 CFR 60.670, Subpart OOO), 15A NCAC 02D .0501(c)(8) and (18) and General Condition JJ when determining compliance of each individual affected facility with 40 CFR 60.672(a), (b) and (c) **OR** Method 22 testing, in accordance with the requirements of 15A NCAC 02D .0524 (40 CFR 60.670 (Subpart OOO), 15A NCAC 02D .0501(c)(8) and (18) and General Condition JJ, has been or will be performed when determining compliance with the "no visible emissions" standard of 40 CFR 60.672(e). If test results exceed the applicable limit(s) as given in Section 2.1 F.1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

Monitoring [15A NCAC 02Q .0508(f)]

- c. Monitoring to ensure compliance with the applicable emissions standard(s) of Section 2.1 F.1.a. above shall be performed by the Permittee as follows:
 - i. Observation of a building enclosure containing affected facilities:
 - (A) Observe each building containing each NSPS-affected clay grinding plant each month for any fugitive visible emissions. Should any visible emissions exceed 7 percent opacity, each affected facility enclosed in the building shall be deemed to be in noncompliance with 15A NCAC 02D .0524 **UNLESS** a compliance demonstration for each affected facility enclosed in the building is performed in accordance with the following;
 - (B) An approved Method 9 opacity determination meeting the requirements of 40 CFR 60.670 (Subpart OOO, 15A NCAC 02D .0501(c)(8) and (18) is performed for each enclosed NSPS-affected facility and visible emissions are demonstrated to comply with the applicable limit(s) given in 60.672(b) and (c). If compliance for the affected facility cannot be demonstrated, then the affected facility shall be deemed to be in noncompliance with 15A NCAC 02D .0524, **OR**
 - ii. Observation of an individual affected facility enclosed in the building:
 - (A) After the initial performance test required under 40 CFR 60.670, the Permittee shall observe each individual affected facility enclosed in the building each month for any visible emissions which exceed normal. The Permittee shall establish normal emissions by observing each week for thirty (30) days the emissions from each enclosed affected facility **beginning no later than 30 days after commencing operation**. Should monthly observed emissions of an enclosed affected facility exceed the established normal visible emissions for that affected facility, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0524, **UNLESS**,
 - (B) An approved Method 9 (or Method 22 if observing an affected facilities building enclosure) opacity determination meeting the requirements of 40 CFR 60.670 (Subpart OOO, 15A NCAC 02D .0501(c)(8) and (18) is performed for each enclosed affected facility and visible emissions are demonstrated to comply with the applicable limit(s) given in 60.672(b) and (c). If compliance for the affected facility cannot be demonstrated, then the affected facility shall be deemed to be in noncompliance with 15A NCAC 02D .0524.

Record keeping [15A NCAC 02Q .0508(f)]

- d. Results of monitoring shall be maintained in a log (written or electronic form). The following shall be recorded in the log:
 - i. the results of the Permittee's observation to establish normal;
 - ii. the results of the Permittee's monthly buildings fugitive emissions observations or the monthly opacity emissions observations for each affected facility;

- iii. if option in Section 2.1 F.1.c.ii.(A) above is followed, the observation to establish normal should be recorded for each affected facility within each building.
- iv. whether the observed emissions source was a building or each affected facility within each building, the date and time of each observation, and
- v. if any emissions were observed from a building exceeding 7 percent or whether any emissions observed exceeded normal, the time and any resulting action(s) taken to reduce emissions exceeding an applicable limit, and
- vi. the date, time, and type of all corrective actions performed to prevent such an exceedance from re-occurring and a copy of any Method 9 or Method 22 opacity testing performed for the purpose of demonstrating compliance with the applicable emissions limit(s).

The Permittee shall be deemed in non-compliance with Section 2.1.F.1.a. above, if records of the monitoring results are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a written summary report of the all monitoring and record keeping activities as follows:
 - i. a report of any changes in existing facilities as specified in 40 CFR 60.676 - Reporting and record keeping, including equipment being replaced and the replacement equipment of affected facilities. This report shall be submitted to the Administrator as required.
 - ii. a summary report of monitoring and record keeping activities by January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.
 - iii. a report of any non-complying emissions for all emissions which exceed the no visible emission limit of 40 CFR 60.672(e) or the applicable opacity limit(s) of 40 CFR 60.672(a), (b) and (c) as established using Method 9 or 22 compliance demonstrations conducted on an affected facility or building, along with the determined cause of exceedance and the resulting corrective action taken.

2.2- Multiple Emission Source(s) Specific Limitations and Conditions

A. Facility-wide affected sources

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
odors	odorous emissions must be controlled; State-enforceable only	15A NCAC 02D .1806
toxic air pollutants	toxic air pollutant emissions shall not exceed the levels listed in 02Q .0711 unless ambient standards are not exceeded; State-enforceable only	15A NCAC 02Q .0711
	toxic air pollutant emissions shall not exceed their modeled acceptable ambient levels; State-enforceable only	15A NCAC 02D .1100
PM10	the facility wide PM10 emissions shall not exceed 250 tons per consecutive 12-month period.	15A NCAC 02Q .0317
carbon monoxide	the facility wide carbon monoxide emissions shall not exceed 250 tons per consecutive 12-month period.	15A NCAC 02Q .0317

STATE-ENFORCEABLE ONLY

1. 15A NCAC 02D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS

- a. The Permittee shall not operate the facility without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility's boundary.

STATE-ENFORCEABLE ONLY

2. **TOXIC AIR POLLUTANT EMISSIONS LIMITATION AND REQUIREMENT** - Pursuant to 15A NCAC 02D .1100 and in accordance with the approved application for an air toxic compliance demonstration, the following permit limit shall not be exceeded:

EMISSION SOURCE(S)	TOXIC AIR POLLUTANT(S)	EMISSION LIMIT(S)
Brick Tunnel Kilns 1, 2, 3, and 4 (ID Nos. ES-K1, ES-K2, ES-K3, and ES-K4) <i>[Note: aggregate emissions from the kilns]</i>	arsenic	13.1 pounds per year
	benzene	1221.0 pounds per year
	cadmium	6.31 pounds per year
	chlorine	1.50 pounds per day (24-hour) 0.0625 pounds per hour
	soluble chromate compounds, as chromium (VI) equivalent	0.0588 pounds per day (24-hour)
	di(2-ethylhexyl)phthalate	2.31 pounds per day
	fluorides	2.40 pounds per hour 57.7 pounds per day (24-hour)
	hydrogen chloride	6.63 pounds per hour
	hydrogen fluoride	20.6 pounds per hour 495.0 pounds per day (24-hour)

- a. To ensure compliance with the above limits, the following restrictions shall apply:
 - i. The brick tunnel kiln (ID No. ES-K1) shall be limited to a fired brick production capacity of 12.24 tons per hour and shall have its two stack exits a minimum of 50 feet in height.
 - ii. The brick tunnel kiln (ID No. ES-K2) shall be limited to a fired brick production capacity of 9.64 tons per hour and shall have its two stack exits a minimum of 70 feet in height.
 - iii. The brick tunnel kiln (ID No. ES-K3) shall be limited to a fired brick production capacity of 12.67 tons per hour and shall have its single stack exit a minimum of 45 feet in height.
 - iv. The brick tunnel kiln (ID No. ES-K4) shall be limited to a fired brick production capacity of 13.5 tons per hour and shall have its single stack exit a minimum of 60 feet in height.
 - v. The dry lime adsorber (DLA) (ID No. CD-K4-SCR) shall be operated for control of emissions of hydrogen chloride and hydrogen fluoride when the brick tunnel kiln (ID No. ES-K4) is in operation with following exception:
 - (A) the Permittee shall be allowed to bypass the DLA (ID No. CD-K4-SCR) for routine control device maintenance and continue operation of the brick tunnel kiln (ID No. ES-K4) for up to 4% of the annual operating uptime of the kiln.
 - vi. The bypass damper position (open or closed) associated with DLA (ID No. CD-K4-SCR) shall be monitored and recorded when the brick tunnel kiln (ID No. ES-K4) is in operation.
 - vii. The limestone feeder setting of the DLA (ID No. CD-K4-SCR) shall be maintained at or above 40 pounds per hour averaged over a 24-hour block period.
 - viii. The DLA (ID No. CD-K4-SCR) shall contain an adequate amount of limestone in the storage bin and hopper during operation.
 - ix. The Permittee shall use the same grade of limestone from the same source in the DLA (ID No. CD-K4-SCR) as used during the most recent performance test.
- b. To ensure compliance with the above restrictions, the following monitoring and recordkeeping requirements shall apply:

- i. The Permittee shall monitor and record electronically the bypass damper position (open or closed) associated with the DLA (ID No. CD-K4-SCR) at least every 15 minutes. In the alternative, a daily report showing the amount of open and/or closed time for the previous 24 hours may be generated from the plant computer. As a third alternative, manual log sheets may be used. The reason for each bypass event shall also be recorded in a logbook or by other electronic method.
- ii. Once per day, the Permittee shall verify that the limestone hopper and storage bin at the DLA (**ID No. CD-K4-SCR**) contain adequate limestone and record the results.
- iii. The Permittee shall record the limestone feeder setting daily in logbook or by other electronic method to verify that the feeder setting is being maintained at or above 40 pounds per hour.
- iv. The Permittee shall maintain records of the source and type of limestone utilized in the DLA (ID No. ES-K4-SCR) during the most recent performance test in a logbook or by other electronic method.
- v. The Permittee shall monitor and record operating uptime of the brick tunnel kiln (ID No. ES-K4) and the downtime associated the routine control device maintenance of the DLA (ID No. CD-K4-SCR).

STATE-ENFORCEABLE ONLY

3. 15A NCAC 02Q .0711: PERMIT REQUIREMENTS FOR TOXIC AIR POLLUTANTS and 15A NCAC 02Q .0705: EXISTING FACILITIES AND SIC CALLS for TOXIC AIR POLLUTANT EMISSIONS

- a. Pursuant to 15A NCAC 02Q .0711 "Emission Rates Requiring a Permit," for each of the below listed toxic air pollutants (TAPs), the Permittee has made a demonstration that facility-wide actual emissions do not exceed the Toxic Permit Emission Rates (TPERs) listed in 15A NCAC 02Q .0711. The facility shall be operated and maintained in such a manner that emissions of any listed TAPs from the facility, including fugitive emissions, will not exceed TPERs listed in 15A NCAC 02Q .0711.
 - i. A permit to emit any of the below listed TAPs shall be required for this facility if actual emissions from all sources will become greater than the corresponding TPERs.
 - ii. **PRIOR** to exceeding any of these listed TPERs, the Permittee shall be responsible for obtaining a permit to emit TAPs and for demonstrating compliance with the requirements of 15A NCAC 02D.1100 "Control of Toxic Air Pollutants".
 - iii. In accordance with the approved application, the Permittee shall maintain records of operational information demonstrating that the TAP emissions do not exceed the TPERs as listed below:

Pollutant (CAS Number)	TPERs Limitations			
	Carcinogens (lb/yr)	Chronic Toxicants (lb/day)	Acute Systemic Toxicants (lb/hr)	Acute Irritants (lb/hr)
beryllium (7440-41-7)	0.28			
carbon disulfide (75-15-0)		3.9		
p-dichlorobenzene (106-46-7)				16.8
formaldehyde (50-00-0)				0.04
manganese and compounds		0.63		
mercury, aryl and inorganic compounds		0.013		
methyl chloroform (71-55-6)		250		64
methyl ethyl ketone (78-93-3)		78		22.4

Pollutant (CAS Number)	TPERs Limitations			
	Carcinogens (lb/yr)	Chronic Toxicants (lb/day)	Acute Systemic Toxicants (lb/hr)	Acute Irritants (lb/hr)
nickel metal (7440-02-0)		0.13		
perchloroethylene (127-18-4)	13,000			
phenol (108-95-2)			0.24	
styrene (100-42-5)			2.7	
toluene (108-88-3)		98		14.4
xylene (1330-20-7)		57		16.4

- b. As of January 23, 2006, emissions of toxic air pollutants have been demonstrated on a facility-wide basis (excluding those sources exempt under 15A NCAC 02Q .0702 "Exemptions") that each of the toxic air pollutants (TAPs) emitted from all sources at the facility are either below its respective toxic permit emission rates (TPER) listed in 15A NCAC 02Q .0711 - "Emission Rates Requiring a Permit" or the TAPs are in compliance with 15A NCAC 02D .1100 "Control of Toxic Air Pollutants" as described elsewhere in this permit.

4. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS FOR 15A NCAC 02D .0530 "PREVENTION OF SIGNIFICANT DETERIORATION FOR PM10"

- a. In order to avoid classification as a major stationary source pursuant to 15A NCAC 02D .0530(b), the facility wide PM10 emissions discharged into the atmosphere shall be less than 250 tons per consecutive twelve-month period.

Testing [15A NCAC 02D .0501(c)(3)]

- b. If emissions testing is required, the testing shall be performed in accordance General Condition JJ. If the results of this test are above the limits given in Section 2.2 A. 4. a. above, the Permittee shall be classified as a major stationary source pursuant to 15A NCAC 02D .0530(b).

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- c. To ensure that the emissions are less than the limit in 2.2 A.4.a, the Permittee shall process no more than 32,000 tons of coating material in the coating dryer (ID No. ES-CD) per consecutive 12-month period. The Permittee shall be classified as a major stationary source pursuant to with 15A NCAC 02D .0530(b) if the amount of coating material exceeds this amount.
- d. To assure compliance, the Permittee shall maintain records:
- the Permittee shall record and maintain (in written or electronic format) the amount of coating material dried each month.

The Permittee shall be deemed in noncompliance with 15A NCAC 02Q .0317 if the amount of coating material dried each month is not recorded or if the amount of coating material processed exceeds the limit in Section 2.2 A.4.c.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
- The monthly amount of coating material dried, and
 - The amount of coating material dried for each of the 12-month periods over the previous 17 months.
 - All instances of deviations from the requirements of this permit condition must be clearly identified.

5. **15A NCAC 02Q .0317: AVOIDANCE CONDITIONS FOR 15A NCAC 02D .0530 “PREVENTION OF SIGNIFICANT DETERIORATION FOR CARBON MONOXIDE**

- a. In order to avoid classification as a major stationary source pursuant to 15A NCAC 02D .0530(b), the facility wide carbon monoxide emissions discharged into the atmosphere less than 250 tons per consecutive twelve-month period.

Testing [15A NCAC 02D .0501(c)(3)]

- b. If emissions testing is required, the testing shall be performed in accordance General Condition JJ. If the results of this test are above the limits given in Section 2.2 A.5.a above, the Permittee shall be classified as a major stationary source pursuant to 15A NCAC 02D .0530(b).

Monitoring/Recordkeeping [15A NCAC 02Q .0508 (f)]

- c. To ensure that the emissions are less than the limit in 2.2 A.5.a, the combined carbon monoxide emissions from emission sources ES-K1, ES-K2, ES-K3, and ES-K4 shall not exceed 249 tons per consecutive 12-month period. The Permittee shall be classified as a major stationary source pursuant to 15A NCAC 02D .0530(b) if the combined emissions exceed this amount.
- d. To assure compliance, the Permittee shall maintain records as follows:
- i. the Permittee shall record and maintain (in written or electronic format) the monthly total tons of brick produced for each kiln (ES-K1, ES-K2, ES-K3, and ES-K4),
- e. Each month calculations shall be performed and recorded to determine the actual carbon monoxide emissions. The carbon monoxide emissions shall be calculated using an emission factor of 1.2 pounds of carbon monoxide per ton of brick produced unless the emission factor is revised through performance testing. When revised through performance testing, the carbon monoxide emission factor may be modified through an administrative amendment to the permit to reflect the results of the most recent performance test(s). The Permittee shall not use the updated values until the test results are incorporated into the permit. The Permittee shall be deemed in noncompliance with 15A NCAC 02Q .0317 if the above records are not kept or if the carbon monoxide emissions exceed the limit in Section 2.2 A.5.a.

Reporting [15A NCAC 02Q .0508(f)]

- f. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
- i. The monthly carbon monoxide emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months; and
- ii. All instances of deviations from the requirements of this permit condition must be clearly identified.

SECTION 3 - GENERAL CONDITIONS (version 4.0 12/17/15)

This section describes terms and conditions applicable to this Title V facility.

A. **General Provisions** [NCGS 143-215 and 15A NCAC 02Q .0508(i)(16)]

1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 02D and 02Q.
2. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement action by the DAQ.
3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.

B. **Permit Availability** [15A NCAC 02Q .0507(k) and .0508(i)(9)(B)]

The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environmental Quality upon request.

C. **Severability Clause** [15A NCAC 02Q .0508(i)(2)]

In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.

D. **Submissions** [15A NCAC 02Q .0507(e) and 02Q .0508(i)(16)]

Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit. For continuous emissions monitoring systems (CEMS) reports, continuous opacity monitoring systems (COMS) reports, quality assurance (QA)/quality control (QC) reports, acid rain CEM certification reports, and NOx budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:

Supervisor, Stationary Source Compliance
North Carolina Division of Air Quality
1641 Mail Service Center
Raleigh, NC 27699-1641

All submittals shall include the facility name and Facility ID number (refer to the cover page of this permit).

E. **Duty to Comply** [15A NCAC 02Q .0508(i)(3)]

The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements constitutes a violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

F. Circumvention - STATE ENFORCEABLE ONLY

The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air pollution control device(s) and appurtenances.

G. Permit Modifications

1. Administrative Permit Amendments [15A NCAC 02Q .0514]
The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 02Q .0514.
2. Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 02Q .0524 and 02Q .0505]
The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 02Q.0524 and 02Q .0505.
3. Minor Permit Modifications [15A NCAC 02Q .0515]
The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 02Q .0515.
4. Significant Permit Modifications [15A NCAC 02Q .0516]
The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 02Q .0516.
5. Reopening for Cause [15A NCAC 02Q .0517]
The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 02Q .0517.

H. Changes Not Requiring Permit Modifications

1. Reporting Requirements
Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:
 - a. changes in the information submitted in the application;
 - b. changes that modify equipment or processes; or
 - c. changes in the quantity or quality of materials processed.

If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.

2. Section 502(b)(10) Changes [15A NCAC 02Q .0523(a)]
 - a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
 - b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
 - i. the changes are not a modification under Title I of the Federal Clean Air Act;
 - ii. the changes do not cause the allowable emissions under the permit to be exceeded;
 - iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
 - iv. the Permittee shall attach the notice to the relevant permit.
 - c. The written notification shall include:
 - i. a description of the change;
 - ii. the date on which the change will occur;
 - iii. any change in emissions; and
 - iv. any permit term or condition that is no longer applicable as a result of the change.
 - d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.
3. Off Permit Changes [15A NCAC 02Q .0523(b)]
The Permittee may make changes in the operation or emissions without revising the permit if:
 - a. the change affects only insignificant activities and the activities remain insignificant after the change; or
 - b. the change is not covered under any applicable requirement.
4. Emissions Trading [15A NCAC 02Q .0523(c)]
To the extent that emissions trading is allowed under 15A NCAC 02D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 02Q .0523(c).

I.A. Reporting Requirements for Excess Emissions and Permit Deviations [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]
"Excess Emissions" - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 02D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 02Q .0700. *(Note: Definitions of excess emissions under 02D .1110 and 02D .1111 shall apply where defined by rule.)*

"Deviations" - for the purposes of this condition, any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions as well as excess emissions as defined above lasting less than four hours.

Excess Emissions

1. If a source is required to report excess emissions under NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
2. If the source is not subject to NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 02D .0535 as follows:
 - a. Pursuant to 15A NCAC 02D .0535, if excess emissions last for more than four hours resulting from a malfunction, a breakdown of process or control equipment, or any other abnormal condition, the owner or operator shall:
 - i. notify the Regional Supervisor or Director of any such occurrence by 9:00 a.m. Eastern Time of the Division's next business day of becoming aware of the occurrence and provide:
 - name and location of the facility;
 - nature and cause of the malfunction or breakdown;
 - time when the malfunction or breakdown is first observed;
 - expected duration; and
 - estimated rate of emissions;
 - ii. notify the Regional Supervisor or Director immediately when corrective measures have been accomplished; and
 - iii. submit to the Regional Supervisor or Director within 15 days a written report as described in 15A NCAC 02D .0535(f)(3).

Permit Deviations

3. Pursuant to 15A NCAC 02Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) as follows:
 - a. Notify the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 02D .0535 quarterly. A written report to the Regional Supervisor shall include the probable cause of such deviation and any corrective actions or preventative actions taken. The responsible official shall certify all deviations from permit requirements.

I.B. Other Requirements under 15A NCAC 02D .0535

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 02D .0535, including 15A NCAC 02D .0535(c) as follows:

1. Any excess emissions that do not occur during start-up and shut-down shall be considered a violation of the appropriate rule unless the owner or operator of the sources demonstrates to the Director, that the excess emissions are a result of a malfunction. The Director shall consider, along with any other pertinent information, the criteria contained in 15A NCAC 02D .0535(c)(1) through (7).
2. 15A NCAC 02D .0535(g). Excess emissions during start-up and shut-down shall be considered a violation of the appropriate rule if the owner or operator cannot demonstrate that excess emissions are unavoidable.

J. Emergency Provisions [40 CFR 70.6(g)]

The Permittee shall be subject to the following provisions with respect to emergencies:

1. An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.
2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3. below are met.

3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
 - a. an emergency occurred and the Permittee can identify the cause(s) of the emergency;
 - b. the permitted facility was at the time being properly operated;
 - c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
 - d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

K. **Permit Renewal** [15A NCAC 02Q .0508(e) and 02Q .0513(b)]

This 15A NCAC 02Q .0500 permit is issued for a fixed term not to exceed five years and shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete 15A NCAC 02Q .0500 renewal application is submitted at least nine months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 02Q .0512(b)(1), this 15A NCAC 02Q .0500 permit shall not expire until the renewal permit has been issued or denied. Permit expiration under 15A NCAC 02Q .0400 terminates the facility's right to operate unless a complete 15A NCAC 02Q .0400 renewal application is submitted at least six months before the date of permit expiration for facilities subject to 15A NCAC 02Q .0400 requirements. In either of these events, all terms and conditions of these permits shall remain in effect until the renewal permits have been issued or denied.

L. **Need to Halt or Reduce Activity Not a Defense** [15A NCAC 02Q .0508(i)(4)]

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

M. **Duty to Provide Information (submittal of information)** [15A NCAC 02Q .0508(i)(9)]

1. The Permittee shall furnish to the DAQ, in a timely manner, any reasonable information that the Director may request in **writing** to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.
2. The Permittee shall furnish the DAQ copies of records required to be kept by the permit when such copies are requested by the Director. For information claimed to be confidential, the Permittee may furnish such records directly to the EPA upon request along with a claim of confidentiality.

N. **Duty to Supplement** [15A NCAC 02Q .0507(f)]

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the DAQ. The Permittee shall also provide additional information as necessary to address any requirement that becomes applicable to the facility after the date a complete permit application was submitted but prior to the release of the draft permit.

O. **Retention of Records** [15A NCAC 02Q .0508(f) and 02Q .0508 (l)]

The Permittee shall retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring information, and copies of all reports required by the permit. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. Any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request.

P. **Compliance Certification** [15A NCAC 02Q .0508(n)]

The Permittee shall submit to the DAQ and the EPA (Air and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all federally-enforceable terms and conditions in the permit, including emissions limitations, standards, or work practices. It shall be the responsibility of the current owner to submit a compliance certification for the entire year regardless of who owned the facility during the year. The compliance certification shall

comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:

1. the identification of each term or condition of the permit that is the basis of the certification;
2. the compliance status (with the terms and conditions of the permit for the period covered by the certification);
3. whether compliance was continuous or intermittent; and
4. the method(s) used for determining the compliance status of the source during the certification period.

Q. Certification by Responsible Official [15A NCAC 02Q .0520]

A responsible official shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required by this permit. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

R. Permit Shield for Applicable Requirements [15A NCAC 02Q .0512]

1. Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
2. A permit shield shall not alter or affect:
 - a. the power of the Commission, Secretary of the Department, or Governor under NCGS 143-215.3(a)(12), or EPA under Section 303 of the Federal Clean Air Act;
 - b. the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
 - c. the applicable requirements under Title IV; or
 - d. the ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under 15A NCAC 02Q .0523.
4. A permit shield does not extend to minor permit modifications made under 15A NCAC 02Q .0515.

S. Termination, Modification, and Revocation of the Permit [15A NCAC 02Q .0519]

The Director may terminate, modify, or revoke and reissue this permit if:

1. the information contained in the application or presented in support thereof is determined to be incorrect;
2. the conditions under which the permit or permit renewal was granted have changed;
3. violations of conditions contained in the permit have occurred;
4. the EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or
5. the Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of NCGS Chapter 143, Article 21B.

T. Insignificant Activities [15A NCAC 02Q .0503]

Because an emission source or activity is insignificant does not mean that the emission source or activity is exempted from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement. The Permittee shall have available at the facility at all times and made available to an authorized representative upon request, documentation, including calculations, if necessary, to demonstrate that an emission source or activity is insignificant.

U. Property Rights [15A NCAC 02Q .0508(i)(8)]

This permit does not convey any property rights in either real or personal property or any exclusive privileges.

V. Inspection and Entry [15A NCAC 02Q .0508(l) and NCGS 143-215.3(a)(2)]

1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the DAQ, or an authorized representative, to perform the following:
 - a. enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
 - b. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
 - c. inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
 - d. sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

Nothing in this condition shall limit the ability of the EPA to inspect or enter the premises of the Permittee under Section 114 or other provisions of the Federal Clean Air Act.

2. No person shall refuse entry or access to any authorized representative of the DAQ who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

W. **Annual Fee Payment** [15A NCAC 02Q .0508(i)(10)]

1. The Permittee shall pay all fees in accordance with 15A NCAC 02Q .0200.
2. Payment of fees may be by check or money order made payable to the N.C. Department of Environmental Quality. Annual permit fee payments shall refer to the permit number.
3. If, within 30 days after being billed, the Permittee fails to pay an annual fee, the Director may initiate action to terminate the permit under 15A NCAC 02Q .0519.

X. **Annual Emission Inventory Requirements** [15A NCAC 02Q .0207]

The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 02Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

Y. **Confidential Information** [15A NCAC 02Q .0107 and 02Q .0508(i)(9)]

Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 02Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 02Q .0107.

Z. **Construction and Operation Permits** [15A NCAC 02Q .0100 and .0300]

A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 02Q .0100 and .0300.

AA. **Standard Application Form and Required Information** [15A NCAC 02Q .0505 and .0507]

The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 02Q .0505 and .0507.

BB. **Financial Responsibility and Compliance History** [15A NCAC 02Q .0507(d)(4)]

The DAQ may require an applicant to submit a statement of financial qualifications and/or a statement of substantial compliance history.

CC. **Refrigerant Requirements (Stratospheric Ozone and Climate Protection)** [15A NCAC 02Q .0501(e)]

1. If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR Part 82 Subpart A Appendices A and B, the Permittee shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82 Subpart F.
2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.
3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR § 82.166. Reports shall be submitted to the EPA or its designee as required.

DD. **Prevention of Accidental Releases - Section 112(r)** [15A NCAC 02Q .0508(h)]

If the Permittee is required to develop and register a Risk Management Plan with EPA pursuant to Section 112(r) of the Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.

EE. **Prevention of Accidental Releases General Duty Clause - Section 112(r)(1)** – FEDERALLY-ENFORCEABLE ONLY

Although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release.

FF. **Title IV Allowances** [15A NCAC 02Q .0508(i)(1)]

This permit does not limit the number of Title IV allowances held by the Permittee, but the Permittee may not use allowances as a defense to noncompliance with any other applicable requirement. The Permittee's emissions may not exceed any allowances that the facility lawfully holds under Title IV of the Federal Clean Air Act.

GG. **Air Pollution Emergency Episode** [15A NCAC 02D .0300]

Should the Director of the DAQ declare an Air Pollution Emergency Episode, the Permittee will be required to operate in accordance with the Permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in 15A NCAC 02D .0300.

HH. **Registration of Air Pollution Sources** [15A NCAC 02D .0202]

The Director of the DAQ may require the Permittee to register a source of air pollution. If the Permittee is required to register a source of air pollution, this registration and required information will be in accordance with 15A NCAC 02D .0202(b).

II. **Ambient Air Quality Standards** [15A NCAC 02D .0501(c)]

In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 02D .0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

JJ. **General Emissions Testing and Reporting Requirements** [15A NCAC 02Q .0508(i)(16)]

Emission compliance testing shall be by the procedures of Section .2600, except as may be otherwise required in Rules .0524, .0912, .1110, .1111, or .1415 of Subchapter 02D. If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 02D .2600 and follow the procedures outlined below:

1. The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least **45 days** before conducting the test.
2. Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least **15 days** before beginning the test so that the Director may at his option observe the test.
3. The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.
4. Two copies of the final air emission test report shall be submitted to the Director not later than **30 days** after sample collection unless otherwise specified in the specific conditions. The owner or operator may request an extension to submit the final test report. The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.
 - a. The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:
 - i. Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.
 - ii. Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.
 - iii. Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in this Section if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
 - b. The Director may authorize the Division of Air Quality to conduct independent tests of any source subject to a rule in this Subchapter to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in Section 02D .2600 has precedence over all other tests.

KK. Reopening for Cause [15A NCAC 02Q .0517]

1. A permit shall be reopened and revised under the following circumstances:
 - a. additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
 - b. additional requirements (including excess emission requirements) become applicable to a source covered by Title IV;
 - c. the Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
 - d. the Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 02Q .0513(c).
3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 02Q .0507, .0521, or .0522 shall be followed to reissue the permit. If the State-enforceable only portion of the permit is reopened, the procedures in 15A NCAC 02Q .0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.
4. The Director shall notify the Permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the notification period may be less than 60 days.
5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

LL. Reporting Requirements for Non-Operating Equipment [15A NCAC 02Q .0508(i)(16)]

The Permittee shall maintain a record of operation for permitted equipment noting whenever the equipment is taken from and placed into operation. During operation the monitoring recordkeeping and reporting requirements as prescribed by the permit shall be implemented within the monitoring period.

MM. Fugitive Dust Control Requirement [15A NCAC 02D .0540] - STATE ENFORCEABLE ONLY

As required by 15A NCAC 02D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 02D .0540(f).

"Fugitive dust emissions" means particulate matter from process operations that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

NN. Specific Permit Modifications [15A NCAC 02Q.0501 and .0523]

1. For modifications made pursuant to 15A NCAC 02Q .0501(c)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
2. For modifications made pursuant to 15A NCAC 02Q .0501(d)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 02Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (EPA - Air Planning Branch, 61 Forsyth Street SW, Atlanta, GA 30303) in writing at least seven days before the change is made. The written notification shall include:
 - a. a description of the change at the facility;
 - b. the date on which the change will occur;
 - c. any change in emissions; and
 - d. any permit term or condition that is no longer applicable as a result of the change.

In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the

application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements.

OO. **Third Party Participation and EPA Review** [15A NCAC 02Q .0521, .0522 and .0525(7)]

For permits modifications subject to 45-day review by the federal Environmental Protection Agency (EPA), EPA's decision to not object to the proposed permit is considered final and binding on the EPA and absent a third party petition, the failure to object is the end of EPA's decision-making process with respect to the revisions to the permit. The time period available to submit a public petition pursuant to 15A NCAC 02Q .0518 begins at the end of the 45-day EPA review period.

ATTACHMENT

List of Acronyms

AOS	Alternate Operating Scenario
BACT	Best Available Control Technology
Btu	British thermal unit
CAA	Clean Air Act
CAIR	Clean Air Interstate Rule
CEM	Continuous Emission Monitor
CFR	Code of Federal Regulations
DAQ	Division of Air Quality
DEQ	Department of Environmental Quality
EMC	Environmental Management Commission
EPA	Environmental Protection Agency
FR	Federal Register
GACT	Generally Available Control Technology
HAP	Hazardous Air Pollutant
MACT	Maximum Achievable Control Technology
NAA	Non-Attainment Area
NCAC	North Carolina Administrative Code
NCGS	North Carolina General Statutes
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standard
OAH	Office of Administrative Hearings
PM	Particulate Matter
PM₁₀	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
POS	Primary Operating Scenario
PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO₂	Sulfur Dioxide
tpy	Tons Per Year
VOC	Volatile Organic Compound